1. Place the ATC on level ground and set the parking brake or block the wheels so the vehicle will not roll in either direction.
2. Connect a portable tachometer following the manufacturer's instructions.
3. Start the engine and let it reach normal operating temperature.
4. Set the idle speed by turning the idle speed stop screw (A, **Figure 84**). For correct idle speed refer to **Table 5**.
5. Open and close the throttle a couple of times; check for variation in idle speed. Readjust if necessary.

WARNING

With the engine idling, move the handlebar from side to side. If idle speed increases during this movement, the throttle cable needs adjusting or may be incorrectly routed through the frame. Correct this problem immediately. Do not ride the ATC in this unsafe condition.

6. Turn the engine off and disconnect the portable tachometer.

STORAGE

Several months of inactivity can cause serious problems and a general deterioration of the ATC's condition. This is especially true in areas of weather extremes. During the winter months it is advisable to specially prepare the ATC for lay-up.

Selecting a Storage Area

Most owners store their vehicles in their home garages. If you do not have a home garage, facilities suitable for long-term storage are readily available for rent or lease in most areas. In selecting a building, consider the following points.
1. The storage area must be dry, free from dampness and excessive humidity. Heating is not necessary, but the building should be well-insulated to minimize extreme temperature variations.
2. Buildings with large window areas should be avoided or such windows should be masked if direct sunlight can fall on the ATC. This is also a good security measure.
3. Buildings in industrial areas, where factories are liable to emit corrosive fumes, are not desirable nor are facilities near bodies of salt water.
4. The area should be selected to minimize the possibility of loss from fire, theft or vandalism. The area should be fully insured, perhaps with a package covering fire, theft, vandalism, weather and liability. The advice of your insurance agent should be sought in these matters. The building should be fireproof and items such as the security of doors and windows, alarm facility and proximity of police should be considered.

Preparing ATC for Storage

Careful preparation will minimize deterioration and make it easier to restore the ATC to service later. Use the following procedure.
1. Wash everything completely. Make certain to remove all dirt from all the hard to reach parts like the cooling fins on the head and cylinder. Completely dry all parts of the vehicle to remove all moisture. Wax all painted and polished surfaces, including any chromed areas.
2. Run the engine for about 20-30 minutes to warm up the oil in the engine. Drain the oil, regardless of the time since the last oil change. Fill the engine with the normal quantity and type of oil.
3. Drain all gasoline from the fuel tank, the interconnecting hose and the carburetor. Leave the fuel shutoff valve in the RES position. As an alternative, a fuel preservative may be added to the fuel. This preservative is available from many motorcycle shops and marine equipment suppliers.
4. Lubricate the drive chain and control cables; refer to specific procedures in this chapter.
5. Remove the spark plug and pour about one teaspoon of SAE 10W-30 motor oil into the cylinder. Turn the engine over a few revolutions by hand to distribute the oil and then install the spark plug.
6. On models so equipped, remove the battery from the frame. If there is evidence of acid spillage in the battery box, neutralize it with a baking soda solution, wash clean and repaint the damaged area. Store the battery in a warm area and recharge it every 2 weeks.
7. One additional safeguard for winter or prolonged storage is the Engine Protection Dispenser that screws into the spark plug hole. It dispenses a vapor into the cylinder, crankcase, carburetor and muffler which works against rust and acid damage. It is rated to be good for up to 2 years and is available from the Brookstone Company, 127 Voss Farm Road, Peterborough, NH 03458. The catalog number is P-3304.
8. Tape or tie a plastic bag over the end of the muffler to prevent the entry of moisture.
9. Check the tire pressure, inflate to the correct pressure and move the ATC to the storage area. Place it securely on a wood blocks with all 3 wheels off the ground.

10. Cover the ATC with a tarp, blanket or heavy plastic drop cloth. Place this cover mainly as a dust cover--do not wrap it tightly especially if it is plastic, as it may trap moisture. Leave room for air to circulate around the vehicle.

Inspection During Storage

Try to inspect the ATC weekly while in storage. Any deterioration should be corrected as soon as possible. For example, if corrosion of bright metal parts is observed, cover them with a light coat of grease or silicone spray after a thorough polishing.

Turn the engine over a couple of times—don't start it; use the recoil starter with the ignition switch in the OFF position.

Restoring the ATC to Service

An ATC that has been properly prepared and stored in a suitable area requires only light maintenance to restore it to service. It is advisable, however, to perform a tune-up.

1. Before removing the ATC from the storage area, reinflate the tires to the correct pressures. Air loss during storage may have nearly flattened the tires and moving the ATC can cause damage to tires and rims.

WARNING

During the next step, place a metal container under the carburetor to catch all fuel or it will create a real fire danger if allowed to drain onto the ATC and the floor. Dispose of the fuel properly.

2. When the ATC is brought to the work area, drain the fuel tank if fuel preservative was used. Turn the fuel shutoff valve to the OFF position and refill the fuel tank with fresh gasoline.
3. Turn the fuel shutoff valve to the RES position and check for leaks in the fuel system.

WARNING

For the next step, place a metal container under the drain outlet on the float bowl to catch the expelled fuel—this presents a real fire danger if allowed to drain on the floor. Dispose of fuel properly.

4. Open the drain screw and allow several cups of fuel to pass through the fuel system. Turn the fuel shutoff valve to the OFF position and close the drain screw.
5. Remove the spark plug and squirt a small amount of fuel into the cylinder to help remove the oil coating.
6. Remove the engine protection dispenser (if installed) and install a fresh spark plug. Start up the engine.
7. Perform the standard tune-up as described in this chapter.
8. Check the operation of the ignition switch and (on models so equipped) the head and taillight switch. Oxidation of the switch contacts during storage may make them inoperative.
9. On models so equipped, fully charge the battery and install it.
10. Clean and test ride the ATC.

Table 1 MAINTENANCE SCHEDULE*

Every 30 days of operation	• Change engine oil • Clean oil filter screen and filter rotor • Clean and oil air filter element (perform sooner if used in wet or dusty terrain) • Inspect spark plug, regap if necessary • Inspect valve clearance, adjust if necessary • Adjust cam chain tensioner • Check and adjust the carburetor • Check and adjust ignition timing • Inspect fuel lines for chafed, cracked or swollen ends, replace if necessary • Clean fuel strainer, replace if necessary • Check throttle operation, adjust if necessary • Clean spark arrester • Lubricate drive chain • Adjust drive chain tension • Check and adjust clutch free play • Check and adjust brake(s) • Check brake lining wear indicator(s) • Check and adjust rear brake pedal height and free play • Lubricate rear brake pedal and shift lever • Check tire and wheel condition • Inspect front steering for looseness • Check wheel bearings for smooth operation • Check engine mounting bolts for tightness
* This Honda Factory maintenance schedule should be considered as a guide to general maintenance and lubrication intervals. Harder than normal use (racing) and exposure to mud, water, sand, high humidity, etc. will naturally dictate more frequent attention to most maintenance items.	

Table 2 TIRE INFLATION PRESSURE AND CIRCUMFERENCE MEASUREMENTS

Model	Tire size (Front and rear)	Tire pressure kg/cm²	psi	Circumference mm	in.
ATC70	16×8-7	0.2	2.8	1,520	60
ATC90					
1970-1974	NA	NA	NA	NA	NA
1975-1978	22×11-8 ATV	0.15	2.2	1,742	68.6
ATC110	22×11-8 ATV	0.15	2.2	1,742	68.6
ATC125	22×11-8 ATV	0.15	2.2	1,742	68.6

NA—Honda does not provide service information for all models.

Table 3 BATTERY STATE OF CHARGE

Specific Gravity	State of Charge
1.110-1.130	Discharged
1.140-1.160	Almost discharged
1.170-1.190	One-quarter charged
1.200-1.220	One-half charged
1.230-1.250	Three-quarters charged
1.260-1.280	Fully charged

Table 4 ENGINE OIL CAPACITY

Model	Liters	U.S. qt.	Imp. qt.
ATC70	0.8	0.9	0.65
ATC90; 1979-1980 ATC110	0.9	1.0	0.79
1981-on ATC110	1.1	1.12	0.9
ATC125M	1.0	1.06	0.88

Table 5 TUNE-UP SPECIFICATIONS

Valve clearance	
Intake and exhaust	
ATC70, ATC90	0.05 mm (0.002 in.)
ATC110, ATC125M	0.07 mm (0.005 in.)
Compression pressure (at sea level)	
ATC70, ATC90	10-12 kg/cm² (142-170 psi)
ATC110, ATC125M	11-14 kg/cm² (156-198 psi)
Spark plug type	
ATC70	NGK C7HS, ND U22FS
ATC90	NGK D-8HS, ND X24FS
ATC110	
1979-1981	NGK D-8HS
1982-on	NGK DR8HS
ATC125M	NGK DR8ES-L, ND X24ESR-U, Champion RA6YC
Spark plug gap	0.6-0.7 mm (0.024-0.028 in.)
Contact breaker point gap	0.3-0.4 mm (0.012-0.016 in.)
Ignition timing @ idle	Timing mark "F"
Idle speed	
ATC70	1,500 ±100 rpm
ATC90	1,300 ±100 rpm
ATC110, ATC125M	1,700 ±100 rpm